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**Cronan O'Connell**  
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***EX PARTE***

May 20, 2004

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., TW-A325  
Washington, DC 20554

*Re: In the Matter of Performance Measurements and Standards for Interstate Special Access Services, CC Docket No. 01-321; In the Matter of Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements, WC Docket No. 02-112; In the Matter of BellSouth Telecommunications Inc. Section 272 Biennial Audit Report, EB Docket No. 03-197; In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended, CC Docket No. 96-149*

Dear Ms. Dortch:

On May 19, 2004, Cronan O'Connell, Gregory Smith and Todd Staebell in person, and Robert McKenna and David Phillips via telephone conference bridge, representing Qwest Communications International Inc. ("Qwest"), met with the following members of the Wireline Competition Bureau/Pricing Policy Division: Michael Carowitz, William Cox, William Kehoe, Pamela Megna, William Dever, Brad Koerner and Julie Veach to discuss Qwest's assessment of the BellSouth Metric Program proposal as filed on April 29, 2004 in the above captioned proceedings. The attached documents summarize Qwest's view points represented during the discussions.

In accordance with Commission rule 47 C.F.R. § 1.49(f), this *ex parte* letter is being filed electronically for inclusion in the public record of the above-referenced proceedings pursuant to Commissions rule 47 C.F.R. § 1.1206(b)(2).

Sincerely,  
/s/ Cronan O'Connell

cc:  
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Julie Veach ([julie.veach@fcc.gov](mailto:julie.veach@fcc.gov))

Attachments

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# Assessment of BellSouth Proposal

# Summary

- **Qwest would provide its existing 272 reports to meet these reporting requirements**
  - Qwest's 272 reports are substantially the same as those proposed by BellSouth
  - Qwest has already developed reports for the measurements the Commission seeks as a result of the 272 Audit
    - This system recently passed an audit by the 272 independent auditor
  - This reporting system was originally developed for the purposes of 271 PID reporting
  - Qwest agrees to measure FG-D and PIC if required upon sunset of 272
  - Qwest PIC change measurement would continue to be measured as a percent completed within specified intervals
- **Parity should be the measurement standard**
  - Compares how each RBOC treats its affiliates and non-affiliates
  - Allows the flexibility to utilize individual RBOC standards
  - Avoids a lengthy and complex standard setting process

# Individual Measurement Analysis

## Average PIC Change Interval (PIC2)

- Qwest measures % PIC requests completed within the specified intervals
- Qwest PIC changes are done in a once-a-day batch process
  - No capacity to measure in hours
- Qwest provides two benchmarks
  - 1-Day interval for simple
  - 3-Day interval for complex
- The Qwest 272 measurement is equivalent to that proposed by BellSouth
  - Eliminates the skewing of data from long duration outliers
  - Allows tailoring to individual RBOC standards and disaggregations

# Individual Measurement Analysis

## PC-1-272 – Timely IXC Initiated PIC Change Requests

<b>Purpose:</b> Evaluates the timeliness of IXC initiated PIC Change Requests <sup>NOTE 1</sup> processed by time intervals.	
<b>Description:</b> Measures the percentage of IXC initiated PIC change requests completed within the specified interval; e.g. one or three days. <ul style="list-style-type: none"> <li>Includes all IXC initiated PIC change requests received for processing Monday – Friday by 10:00 p.m. MT and Saturday by 5:30 p.m. MT, during the reporting period.</li> <li>Timely PIC change requests include all IXC initiated PIC change requests processed within the specified interval.</li> </ul>	
<b>Reporting Period:</b> One month	<b>Unit of Measure:</b> Percent
<b>Reporting Comparisons:</b> QLDC and QCC aggregate and IXC Non-Affiliates results .	<b>Disaggregation Reporting:</b> Statewide and Region level. PC-1A PIC changes within one business days. PC-1B PIC changes within three business days.
<b>Formula:</b> Formula: ((Total IXC initiated PIC change requests, received by the specified cutoff time and completed within the specified interval in the reporting period), ÷ (Total number of IXC initiated PIC change requests completed in the reporting period)) x 100.	
<b>Exclusions:</b> <ul style="list-style-type: none"> <li>Records with invalid file creation dates and network updates.</li> <li>Records from IXCs that have subscribed to default CARE package.</li> <li>Records with missing data essential to the calculation of the measurement per the SPMD.</li> </ul>	
<b>Product Reporting:</b> None	<b>Standard:</b> Parity
<b>Availability:</b> Available	<b>Notes:</b> 1. PIC Changes included in this measurement consist of IXC initiated requests to change InterLATA and/or intraLATA primary interexchange carriers.

# Individual Measurement Analysis

## Firm Order Confirmation Timeliness (FOCT2)

- Need generic standard interval language that ties to individual company published standards
- Eliminate Percent FOC Completeness Measure
  - Qwest has gained approval to eliminate a similar 271 PID accountability measure in all states
- Qwest has a separate exclusion for ICB's
  - Other RBOCs may exclude these as projects

## Percent Installation Appointments Met (PIAM2)

- No required changes
- Qwest excludes customer misses instead of counting as met
- Qwest also provides an Average Interval Measurement

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## Individual Measurement

### New Installation Trouble Report Rate (NITR2)

- Qwest currently measures at the Order level
  - Qwest allows more than one circuit on an Order
- Qwest currently measures within 30 days of installation
- Qwest currently includes TOK and NTF

### Trouble Report Rate (CTTR2)

- No required changes
- Qwest currently includes TOK and NTF

### Average Repair Interval (MAD2)

- No required changes
- Qwest currently includes TOK and NTF



**Service Performance Measurement Descriptions (SPMD)**

**14-State 272 SPMD Version 2.10**

**12 March, 2004**



# **QWEST'S SERVICE PERFORMANCE MEASUREMENT DESCRIPTIONS (SPMD)**

## **14-State 272 SPMD Version 2.10**

### **Introduction**

Qwest will report performance results for the service performance measurements defined herein. In its Section 271 applications, Qwest Corporation made commitments regarding compliance with Section 272(e)(1) of the Act. This included the commitment to provide the performance monitoring that will assist in confirmation of nondiscriminatory performance in Qwest Corporation's dealings with its 272 affiliates.

## Qwest's Service Performance Indicator Definitions

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## PIC Changes

### PC-1-272 – Timely IXC Initiated PIC Change Requests

<b>Purpose:</b> Evaluates the timeliness of IXC initiated PIC Change Requests <sup>NOTE 1</sup> processed by time intervals.	
<b>Description:</b> Measures the percentage of IXC initiated PIC change requests completed within the specified interval; e.g. one or three days. <ul style="list-style-type: none"> <li>Includes all IXC initiated PIC change requests received for processing Monday – Friday by 10:00 p.m. MT and Saturday by 5:30 p.m. MT, during the reporting period.</li> <li>Timely PIC change requests include all IXC initiated PIC change requests processed within the specified interval.</li> </ul>	
<b>Reporting Period:</b> One month	<b>Unit of Measure:</b> Percent
<b>Reporting Comparisons:</b> QLDC and QCC aggregate and IXC Non-Affiliates results .	<b>Disaggregation Reporting:</b> Statewide and Region level. PC-1A PIC changes within one business days. PC-1B PIC changes within three business days.
<b>Formula:</b> Formula: ((Total IXC initiated PIC change requests, received by the specified cutoff time and completed within the specified interval in the reporting period), ÷ (Total number of IXC initiated PIC change requests completed in the reporting period)) x 100.	
<b>Exclusions:</b> <ul style="list-style-type: none"> <li>Records with invalid file creation dates and network updates.</li> <li>Records from IXCs that have subscribed to default CARE package.</li> <li>Records with missing data essential to the calculation of the measurement per the SPMD.</li> </ul>	
<b>Product Reporting:</b> None	<b>Standard:</b> Parity
<b>Availability:</b> Available	<b>Notes:</b> 1. PIC Changes included in this measurement consist of IXC initiated requests to change InterLATA and/or intraLATA primary interexchange carriers.

## Pre-Order/Order

### PO-5-272 – Firm Order Confirmations (FOCs) On Time

<b>Purpose:</b> Monitors the timeliness with which Qwest returns Firm Order Confirmations (FOCs) to IXC's in response to ASRs received from IXC, focusing on the degree to which FOCs are provided within specified intervals.			
<b>Description:</b> Measures the percentage of Firm Order Confirmations (FOCs) that are provided to IXC's within the intervals specified under "Standards" below for FOC notifications. <ul style="list-style-type: none"><li>Includes all Switched and Special Access ASRs that are submitted through the specified interface or in the specified manner (i.e., facsimile) that receive an FOC during the reporting period, subject to exclusions specified below.</li><li>The interval measured is the period between the application date and time, as defined herein, and Qwest's response with a FOC notification (notification date and time).</li><li>ASRs are measured only in business days.</li><li>ASRs will be evaluated according to the FOC interval categories shown in the "standards" section below, based on the number of lines/services requested on the ASR.</li></ul>			
<b>Reporting Period:</b> One month		<b>Unit of Measure:</b> Percent	
<b>Reporting Comparisons:</b> QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results.		<b>Disaggregation Reporting:</b> Statewide level and Region level.	
<b>Formula:</b> {[Count of ASRs for which the original FOC's "(FOC Notification Date & Time) – (Application Date & Time)" is within the intervals specified for the service category involved] ÷ (Total Number of original FOC Notifications transmitted for the service category in the reporting period)} x 100			
<b>Exclusions:</b> <ul style="list-style-type: none"><li>ASRs involving individual case basis (ICB) handling based on quantities of lines, as specified in the Service Interval Guide for Access Services or for service/request types deemed to be projects.</li><li>Hours on Weekends and holidays.</li><li>ASRs with IXC-requested FOC arrangements different from standard FOC arrangements.</li><li>Records with invalid product codes.</li><li>Records missing data essential to the calculation of the measurement per the SPMD.</li><li>Invalid start/stop dates/times.</li><li>Records with invalid application or confirmation dates..</li></ul>			
<b>Product Reporting:</b> <ul style="list-style-type: none"><li>DS0</li><li>DS1</li><li>DS3</li><li>OCN</li><li>FG-D</li></ul>		<b>Standard:</b> <ul style="list-style-type: none"><li>Parity with IXC Non-Affiliates DS0</li><li>Parity with IXC Non-Affiliates DS1</li><li>Parity with IXC Non-Affiliates DS3</li><li>Parity with IXC Non-Affiliates OCN</li><li>Parity with IXC Non-Affiliates FG-D</li></ul>	
		– <b>Product Group</b> <small>NOTE 1</small>	
		<b>DS0, DS1, DS3 &amp; Higher</b>	<b>3 Business Days</b>
		<b>Feature Group D</b>	<b>5 Business Days</b>
<b>Availability:</b> Available		<b>Notes:</b> 1. For ASRs where the due date interval in the Service Interval Guide for Access Services is ICB, the FOC interval is ICB.	

## Ordering and Provisioning

### OP-3-272 – Installation Commitments Met

<b>Purpose:</b> Evaluates the extent to which Qwest installs services for Customers by the scheduled due date.	
<b>Description:</b> Measures the percentage of orders for which the scheduled due date is met. <ul style="list-style-type: none"> <li>All inward Switched and Special Access orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period are measured, subject to exclusions specified below. Change order types included in this measurement consist of all C orders representing inward activity (with “I” and “T” action coded line USOCs). Also included are orders with customer-requested due dates longer than the standard interval.</li> <li>Completion date on or before the Applicable Due Date recorded by Qwest is counted as a met due date. The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any.</li> </ul>	
<b>Reporting Period:</b> One month	<b>Unit of Measure:</b> Percent
<b>Reporting Comparisons:</b> QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	<b>Disaggregation Reporting:</b> Statewide level and Region level.
<b>Formula:</b> $[(\text{Total Orders completed in the reporting period on or before the Applicable Due Date}) \div (\text{Total Orders Completed in the Reporting Period})] \times 100$	
<b>Explanation:</b> The percent commitments met is obtained by dividing the total number of service orders completed on or before the Applicable Due Date (as defined in the description above) by the total number of service orders completed during the measurement period.	
<b>Exclusions:</b> <ul style="list-style-type: none"> <li>Disconnect, From (another form of disconnect) and Record order types.</li> <li>Due dates missed for standard categories of customer and non-Qwest reasons. Standard categories of customer reasons are: previous service at the location did not have a customer-requested disconnect order issued, no access to customer premises, and customer hold for payment. Standard categories of non-Qwest reasons are: Weather, Disaster, and Work Stoppage.</li> <li>Records involving official company services.</li> <li>Records with invalid due dates or application dates.</li> <li>Records with invalid completion dates.</li> <li>Records with invalid product codes.</li> <li>Records missing data essential to the calculation of the measurement per the SPMD.</li> </ul>	
<b>Product Reporting:</b>	<b>Standards:</b>
<ul style="list-style-type: none"> <li>DS0</li> <li>DS1</li> <li>DS3</li> <li>OCN</li> <li>FG-D</li> <li>Frame Relay</li> </ul>	<ul style="list-style-type: none"> <li>Parity with IXC Non-Affiliates DS0</li> <li>Parity with IXC Non-Affiliates DS1</li> <li>Parity with IXC Non-Affiliates DS3</li> <li>Parity with IXC Non-Affiliates OCN</li> <li>Parity with IXC Non-Affiliates FG-D</li> <li>Parity with IXC Non-Affiliates Frame Relay</li> </ul>
<b>Availability:</b> Available	<b>Notes:</b>

## OP-4-272 – Average Installation Interval

<b>Purpose:</b> Evaluates the timeliness of Qwest's installation of services for customers, focusing on the average time to install service.	
<b>Description:</b> Measures the average interval (in business days) <sup>NOTE 1</sup> between the application date and the completion date for Switched and Special Access service orders accepted and implemented. <ul style="list-style-type: none"> <li>Includes all inward orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period, subject to exclusions specified below. Change order types for additional lines consist of all C orders representing inward activity (with "I" and "T" action coded line USOCs).</li> <li>Intervals for each measured event are counted in whole days: the application date is day zero (0); the day following the application date is day one (1).</li> <li>The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any.</li> <li>Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date, as applied in the formula below, are calculated by subtracting the latest Qwest-initiated due date, if any, following the Applicable Due Date, from the subsequent customer-initiated due date, if any.</li> </ul>	
<b>Reporting Period:</b> One month	<b>Unit of Measure:</b> Average Business Days
<b>Reporting Comparisons:</b> QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results.	<b>Disaggregation Reporting:</b> Statewide level and Region level.
<b>Formula:</b> $\frac{\sum[(\text{Order Completion Date}) - (\text{Order Application Date}) - (\text{Time interval between the Original Due Date and the Applicable Date}) - (\text{Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date})]}{\text{Total Number of Orders Completed in the reporting period}}$	
<b>Explanation:</b> The average installation interval is derived by dividing the sum of installation intervals for all orders (in business days) <sup>NOTE 1</sup> by total number of service orders completed in the reporting period.	
<b>Exclusions:</b> <ul style="list-style-type: none"> <li>Orders with customer requested original due dates greater than the current standard interval.</li> <li>Disconnect, From (another form of disconnect) and Record order types.</li> <li>Records involving official company services.</li> <li>Records with invalid due dates or application dates.</li> <li>Records with invalid completion dates.</li> <li>Records with invalid product codes.</li> <li>Records missing data essential to the calculation of the measurement per the SPMD.</li> </ul>	
<b>Product Reporting:</b>	<b>Standards:</b>
<ul style="list-style-type: none"> <li>DS0</li> <li>DS1</li> <li>DS3</li> <li>OCN</li> <li>FG-D</li> <li>Frame Relay</li> </ul>	<ul style="list-style-type: none"> <li>Parity with IXC Non-Affiliates DS0</li> <li>Parity with IXC Non-Affiliates DS1</li> <li>Parity with IXC Non-Affiliates DS3</li> <li>Parity with IXC Non-Affiliates OCN</li> <li>Parity with IXC Non-Affiliates FG-D</li> <li>Parity with IXC Non-Affiliates Frame Relay</li> </ul>
<b>Availability:</b> Available	<b>Notes:</b> <ol style="list-style-type: none"> <li>Saturday is counted as a business day when the service order is due or completed on Saturday.</li> </ol>

## Maintenance and Repair

### MR-5-272 – All Troubles Cleared within 4 hours

<b>Purpose:</b> Evaluates timeliness of repair for specified services, focusing on all trouble reports of all types (including out of service and service affecting troubles) and on the number of such trouble reports cleared within the standard estimate for specified services (i.e., 4 hours).	
<b>Description:</b> Measures the percentage of Switched and Special Access trouble reports for specified services that are cleared within 4 hours of receipt of trouble reports from IXC's or from retail customers. <ul style="list-style-type: none"> <li>Includes all trouble reports, closed during the reporting period, which involve a specified service, subject to exclusions specified below.</li> <li>Time measured is from date and time of receipt to date and time trouble is cleared.</li> </ul>	
<b>Reporting Period:</b> One month	<b>Unit of Measure:</b> Percent
<b>Reporting Comparisons:</b> QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	<b>Disaggregation Reporting:</b> Statewide level and Region level.
<b>Formula:</b> $[(\text{Number of Trouble Reports closed in the reporting period that are cleared within 4 hours}) \div (\text{Total Trouble Reports closed in the reporting period})] \times 100$	
<b>Exclusions:</b> <ul style="list-style-type: none"> <li>Trouble reports coded to trouble codes for Carrier Action (IXC) and Customer Provided Equipment (CPE).</li> <li>Subsequent trouble reports of any trouble before the original trouble report is closed.</li> <li>Information tickets generated for internal Qwest system/network monitoring purposes.</li> <li>Time delays due to "no access" are excluded from repair time.</li> <li>Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete.</li> <li>Records involving official company services.</li> <li>Records with invalid trouble receipt dates.</li> <li>Records with invalid cleared or closed dates.</li> <li>Records with invalid product codes.</li> <li>Records missing data essential to the calculation of the measurement per the SPMD.</li> </ul>	
<b>Product Reporting:</b>	<b>Standards:</b>
<ul style="list-style-type: none"> <li>DS0</li> <li>DS1</li> <li>DS3</li> <li>OCN</li> <li>FG-D</li> <li>Frame Relay</li> </ul>	<ul style="list-style-type: none"> <li>Parity with IXC Non-Affiliates DS0</li> <li>Parity with IXC Non-Affiliates DS1</li> <li>Parity with IXC Non-Affiliates DS3</li> <li>Parity with IXC Non-Affiliates DS3</li> <li>Parity with IXC Non-Affiliates FG-D</li> <li>Parity with IXC Non-Affiliates Frame Relay</li> </ul>
<b>Availability:</b> Available	<b>Notes:</b> .

## MR-6-272 – Mean Time to Restore

<b>Purpose:</b> Evaluates timeliness of repair, focusing how long it takes to restore services to proper operation.	
<b>Description:</b> Measures the time actually taken to clear trouble reports. <ul style="list-style-type: none"> <li>Includes all Switched and Special Access trouble reports closed during the reporting period, subject to exclusions specified below.</li> <li>Includes customer direct reports, customer-relayed reports, and test assist reports that result in a trouble report.</li> <li>Time measured is from date and time of receipt to date and time trouble is cleared.</li> </ul>	
<b>Reporting Period:</b> One month	<b>Unit of Measure:</b> Hours and Minutes
<b>Reporting Comparisons:</b> QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	<b>Disaggregation Reporting:</b> Statewide level and Region level.
<b>Formula:</b> $\frac{\sum[(\text{Date \& Time Trouble Report Cleared}) - (\text{Date \& Time Trouble Report Opened})]}{(\text{Total number of Trouble Reports closed in the reporting period})}$	
<b>Exclusions:</b> <ul style="list-style-type: none"> <li>Trouble reports coded to trouble codes for Carrier Action (IXC) and Customer Provided Equipment (CPE).</li> <li>Subsequent trouble reports of any trouble before the original trouble report is closed.</li> <li>Information tickets generated for internal Qwest system/network monitoring purposes.</li> <li>Time delays due to “no access” are excluded.</li> <li>Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete.</li> <li>Records involving official company services.</li> <li>Records with invalid trouble receipt dates.</li> <li>Records with invalid cleared or closed dates.</li> <li>Records with invalid product codes.</li> <li>Records missing data essential to the calculation of the measurement per the SPMD.</li> </ul>	
<b>Product Reporting:</b>	<b>Standards:</b>
<ul style="list-style-type: none"> <li>DS0</li> <li>DS1</li> <li>DS3</li> <li>OCN</li> <li>FG-D</li> <li>Frame Relay</li> </ul>	<ul style="list-style-type: none"> <li>Parity with IXC Non-Affiliates DS0</li> <li>Parity with IXC Non-Affiliates DS1</li> <li>Parity with IXC Non-Affiliates DS3</li> <li>Parity with IXC Non-Affiliates OCN</li> <li>Parity with IXC Non-Affiliates FG-D</li> <li>Parity with IXC Non-Affiliates Frame Relay</li> </ul>
<b>Availability:</b> Available	<b>Notes:</b> <ol style="list-style-type: none"> <li>Saturday is counted as a business day when the repair is completed on Saturday.</li> </ol>



## MR-8-272 – Trouble Rate

<b>Purpose:</b> Evaluates the overall rate of Special Access trouble reports as a percentage of the total installed base of the service or element.	
<b>Description:</b> Measures Switched and Special Access trouble reports by product and compares them to the number of lines in service. <ul style="list-style-type: none"> <li>Includes all trouble reports closed during the reporting period, subject to exclusions specified below.</li> <li>Includes all applicable trouble reports, including those that are out of service and those that are only service-affecting.</li> </ul>	
<b>Reporting Period:</b> One month	<b>Unit of Measure:</b> Percent
<b>Reporting Comparisons:</b> QCC aggregate, Other Qwest Affiliates and IXC Non-Affiliates results .	<b>Disaggregation Reporting:</b> Statewide level and Region level.
<b>Formula:</b> $[(\text{Total number of trouble reports closed in the reporting period involving the specified service grouping}) \div (\text{Total number of the specified services that are in service in the reporting period})] \times 100$	
<b>Exclusions:</b> <ul style="list-style-type: none"> <li>Trouble reports coded to trouble codes for Carrier Action (IXC) and Customer Provided Equipment (CPE).</li> <li>Subsequent trouble reports of any trouble before the original trouble report is closed.</li> <li>Information tickets generated for internal Qwest system/network monitoring purposes.</li> <li>Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete.</li> <li>Records involving official company services.</li> <li>Records with invalid trouble receipt dates.</li> <li>Records with invalid cleared or closed dates.</li> <li>Records with invalid product codes.</li> <li>Records missing data essential to the calculation of the measurement per the SPMD.</li> </ul>	
<b>Product Reporting:</b>	<b>Standards:</b>
<ul style="list-style-type: none"> <li>DS0</li> <li>DS1</li> <li>DS3</li> <li>OCN</li> <li>FG-D</li> <li>Frame Relay</li> </ul>	<ul style="list-style-type: none"> <li>Parity with IXC Non-Affiliates DS0</li> <li>Parity with IXC Non-Affiliates DS1</li> <li>Parity with IXC Non-Affiliates DS3</li> <li>Parity with IXC Non-Affiliates DS3</li> <li>Parity with IXC Non-Affiliates FG-D</li> <li>Parity with IXC Non-Affiliates Frame Relay</li> </ul>
<b>Availability:</b> Available	<b>Notes:</b>

## DEFINITION OF TERMS

**Affiliate** – The Qwest Long Distance Corporation (QLDC) or Qwest Communications Corporation (QCC) IXC companies. For measurement purposes, Qwest Affiliates are identified by the presence of an ACNA equal to ATS, BEY, CGP, CRV, DGL, HOG, JJJ, LGT, LTL, LWC, NTH, PAC, PHX, QWD, SEP, SMF, SNN, SPA, TED, TOA, TPZ, and VWF..

**Application Date (and Time)** – The date (and time) on which Qwest receives from the IXC a complete and accurate access service request (ASR) or retail order, subject to the following:

- For the following types of requests/orders, the application date (and time) is the start of the next business day:
  - (1) ASRs received after 3:00PM MT.
  - (2) Orders received after 3:00 PM local time.
- For all types of orders that are received from Friday at 7:00 PM MT through Sunday, or on holidays, and do not flow through, the application date (and time) is the next, non-weekend business day.

**Access Service Record (ASR)** – transaction sent from the IXC to the ILEC to order services or to request a change(s) be made to existing services.

**Business Day** – Workdays that Qwest is normally open for business. Business Day = Monday through Friday, excluding weekends and Qwest published Holidays including New Year's Day, Memorial Day, July 4<sup>th</sup>, Labor Day, Thanksgiving and Christmas. Individual measurement definitions may modify (typically expanding) this definition as described in the Notes section of the measurement definition.

**Customer Account Record Exchange** - CARE facilitates the exchange of end user account information between Qwest and Interexchange Carriers. Qwest offers CARE -formatted, industry standard Win, Loss, and Account Maintenance TCSIs in two packages: Premium and Default. Each IXC is required to have an output package set up before they can begin doing business as a 1+ FGD carrier with Qwest.

**Cleared Trouble Report** – a trouble report for which the trouble has been cleared, meaning the customer is “back in service”.

**Closed Trouble Report** – a trouble report that has been closed out from a maintenance center perspective, meaning the ticket is closed in the trouble reporting system following repair of the trouble.

**Common Transport** – Trunk groups between tandem and end office switches that are shared by more than one carrier, often including the traffic of both the ILEC and several IXCs.

**Completion** – The time in the order process when the service has been provisioned and service is available.

**Completion Notice** – A notification the ILEC provides to the IXC to inform the IXC that the requested service order activity is complete.

**Coordinated Access** - These services are a dedicated link, governed by the FCC Tariff 1, Section 7.

The process for ordering Coordinated Access is through Interexchange Carriers channels. The customer chooses an IXC as a vendor to issue an ASR stating their requirements for service. However, beyond that, QC (a regional BOC) will deal directly with the end customer for provisioning, repair and billing. Such services are considered to be “retail” services.

For measurement purposes, Coordinated Access is identified by the presence of an ACNA equal to “ZZZ”, and a “C” in the 5<sup>th</sup> character position of the MCN.

**Customer Requested Due Date** – A specific due date requested by the customer which is either shorter or longer than the standard interval or the interval offered by the ILEC.

**Customer Trouble Reports** – A report that the carrier providing the underlying service opens when notified that a customer has a problem with their service. Once resolved, the disposition of the trouble is changed to closed.

**Dedicated Transport** – A network facility reserved to the exclusive use of a single customer, carrier or pair of carriers used to exchange switched or special, local exchange, or exchange access traffic.

**Delayed Order** – An order which has been completed after the scheduled due date and/or time.

**DS-0** – Digital Service Level 0. Service provided at a digital signal speed commonly at 64 kbps, but occasionally at 56 kbps. The DS-0 product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the DS-0 product.

## DEFINITION OF TERMS (continued)

**DS-1** – Digital Service Level 1. Service provided at a digital signal speed of 1.544 Mbps. The DS-1 product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the DS-1 product.

**DS-3** – Digital Service Level 3. Service provided at a digital signal speed of 44.736 Mbps or higher. The DS-3 product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the DS-3 product.

**Due Date** – The date provided on the Firm Order Confirmation (FOC) the ILEC sends the IXC identifying the planned completion date for the order.

**Feature Group-D** – Feature Group-D is equal access service. It allows the AC (Access Carrier) to offer their subscribers the convenience of 1 plus dialing. It automatically routes the call over the AC's network. The Feat Grp D product for ordering and provisioning is identified by the class of service USOC and line level USOCs. For preorder, maintenance and repair, the circuit identification NC and NCI codes identify the Feat Grp D product.

**Installation** – The activity performed to activate a service.

**Installation Troubles** – A trouble, which is identified after service order activity and installation, has completed on a customer's line. It is likely attributable to the service activity (within a defined time period).

**Interconnection Trunks** – A network facility that is used to interconnect two switches generally of different local exchange carriers

**Inward Activity** – refers to an order for new or additional lines. Change order types for additional lines consist of all C orders with "I" and "T" action coded line USOCs that represent new or additional lines, including conversions from retail to IXC and IXC to IXC.

**Lack of Facilities** – A shortage of cable facilities identified after a due date has been committed to a customer, including the IXC. The facilities shortage may be identified during the inventory assignment process or during the service installation process, and typically triggers a jeopardy.

**Non-Affiliate** – An IXC other than Qwest Wireless, QLDC or QCC companies.

**OCN** - High Capacity Channel service provisioned on Sonet based optical equipment.

**Other Qwest Affiliates** – The Qwest Wireless, (QW) or Qwest Corporation (QC) companies.

For measurement purposes, Other Qwest Affiliates are identified by the presence of an ACNA equal to UWW, TJB, UIA, UWC and ZZZ

**Projects** – Service requests that exceed the line size and/or level of complexity which would allow for the use of standard ordering and provisioning processes. Generally, due dates for projects are negotiated, coordination of service installations/changes is required and automated provisioning may not be practical.

**Service Order** – The work order created and distributed in ILECs systems and to ILEC work groups in response to a complete, valid access service request.

**Service Order Type** – The designation used to identify the major types of provisioning activities associated with a access service request.

**Special Access** – Special Access Services are a dedicated link. Special Access Services are governed by the FCC Tariff 1, Section 7.

The process for ordering Switched and Special Access is through Interexchange Carriers channels. The customer must issue an ASR stating their requirements for service.

Switched and Special Access transactions, for measurement purposes, are identified by the presence of a valid ACNA or CCNA and a "C" in the 5<sup>th</sup> character position of the MCN.

**Standard Interval** – The interval that the ILEC publishes as a guideline for establishing due dates for provisioning a service request. Typically, due dates will not be assigned with intervals shorter than the standard. These intervals are specified by service type and type of service modification requested. ILECs publish these standard intervals in documents used by their own service representatives as well as ordering instructions provided to IXCs in the Qwest Standard Interval Guidelines.

**Switched Access** – Switched Access Service is a dial tone service which requires a dial connection. Switched Access Services are governed by the FCC Tariff 1, Section 6.

**Time to Restore** – The time interval from the receipt, by the ILEC, of a trouble report on a customer's service to the time service is fully restored to the customer.

**Wireless Service** – These services are a dedicated link. Special Access Services are governed by the FCC Tariff 1, Section 7.

The process for ordering Wireless Access is through Wireless Carriers channels who must issue an ASR stating their requirements for service.

Wireless Access transactions, for measurement purposes, are identified by the presence of a valid ACNA or CCNA, a "C" in the 5<sup>th</sup> character position of the MCN and a "W" in the 6<sup>th</sup> character position of the MCN.

## **DEFINITION OF TERMS (continued)**

## GLOSSARY OF ACRONYMS

<u>ACRONYM</u>	<u>DESCRIPTION</u>
ACNA	Access Carrier Name Abbreviation
ASR	Access Service Record (processed via EXACT system)
CARE	Customer Account Record Exchange
CKT	Circuit
CO	Central Office
CPE	Customer Premises Equipment
DB	Database
DS0	Digital Service 0
DS1	Digital Service 1
DS3	Digital Service 3
EAS	Extended Area Service
EB-TA	Electronic Bonding – Trouble Administration
EDI	Electronic Data Interchange
EXACT	Exchange Access Control and Tracking, an operational support system.
FG-D	Feature Group D
FOC	Firm Order Confirmation
ICB	Individual Case Basis
IXC	Interexchange Carrier
ILEC	Incumbent Local Exchange Carrier
IOF	Interoffice Facilities (refers to trunk facilities located between Qwest central offices)
LATA	Local Access Transport Area
LD	Long Distance
LPIC	Local Primary Interexchange Carrier
MCN	Master Customer Number
N, T, C	Service Order Types - - N (new), T (to or transfer), C (change)
NC	Network Channel code
NCI	Network Channel Interface
OOS	Out of service (type of trouble condition)
OSS	Operations-al Support Systems
PIC	Customer Primary Interexchange Carrier
PON	Purchase Order Number
QCC	Qwest Communications Corporation
QLDC	Qwest Long Distance Corporation
RFS	Ready for Service (refers to collocation projects)
SOP	Service Order Processor
SOT	Service Order Type
TN	Telephone Number
USOC	Universal Service Order Code
WFA	Work Force Administration



## **Regulatory Reporting 272 Service Performance Measurements**

### **272 Statistical Methodology**

**8 January 2004**

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***Abstract:***

This document contains the means to interpret the Qwest parity comparisons as they relate to the SPMD calculations.

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## Document Information

**Document  
Owner**

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**Document  
Distribution**

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General.

**Document  
History**

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All revisions made to this document are listed here in chronological order.

<u>Version</u>	<u>Date</u>	<u>Description</u>
01.00	7/27/2003	Initial Release

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# 1 Statistical Methodology

## 1.1

Parity measurements reflect Qwest Corporation's ability to perform for non-affiliate IECs as it does for Qwest affiliates. Qwest Regulatory Reporting uses statistical methods to assess that performance.

The purpose of statistical testing is to account for random variation in the performance results, so that true differences in service can be distinguished from random differences, with specified levels of confidence. It is vitally important that "false positives" – finding a difference in service where no difference truly exists – be controlled. If Qwest is continually confronted with false positives, then it will be unable to implement the process improvements necessary to ensure parity of service.

### 1.1.1 Mod Z Scores

Qwest Regulatory Reporting follows the standard hypothesis testing procedure:

1. Specify a null hypothesis,  $H_0$ , that the performance is equivalent,
2. Specify an alternative hypothesis,  $H_a$ , that there is a difference in performance between non-affiliate IEC and Qwest affiliate,
3. Select a test statistic, e.g., modified  $z$ ,
4. Select a critical value for the test statistic,  $z^*$ .

The testing procedure involves comparing the test statistic,  $z$ , with the critical value,  $z^*$ . If  $z$  is greater than or equal to  $z^*$ , then there is a significant difference in service.

For parity measurements, Regulatory Reporting uses the modified  $z$ -test. In contrast to some states, including New York, Qwest structures the  $z$ -tests so that a positive  $z$ -score indicates inferior performance provided to the non-affiliate IECs.

The modified  $z$ -test is:

$$z = \frac{\bar{x}_{CLEC} - \bar{x}_{Qwest}}{S_D}$$

where:

$$S_D = s_{Qwest} \sqrt{\frac{1}{n_{ILEC}} + \frac{1}{n_{CLEC}}}$$

$s_{Qwest}$  = Qwest affiliate standard deviation

$n_{Qwest}$  = Qwest affiliate sample size

$n_{CLEC}$  = CLEC affiliate sample size

$\bar{x}_{CLEC}$  = CLEC affiliate mean (or proportion)

$\bar{x}_{Qwest}$  = Qwest affiliate mean (or proportion)

The PAPs in each Qwest state (approved by each state Commission and incorporated into the SGATs as Exhibit K) specify different values of  $z^*$  depending on the competitor sample size. For higher sample sizes, higher values of  $z^*$  are used, reflecting the increased statistical confidence in larger samples.

At the 1.645 critical value, the confidence level is 95%. At this level, one test has a 5% probability of finding a difference due to chance alone, even when no true difference exists (a Type I error). At higher critical values this probability is reduced. The variable critical value depending on sample size also provides a fair compromise between Type I and Type II errors (the probability of failing to detect a true difference).<sup>1</sup> Sample size is the best way to reduce Type II error. However, since the results do not come from a controlled study, sample size can not be controlled.

The modified z-test gives a z-score that is then compared to the critical z-value,  $z^*$ . If  $z$  is greater than or equal to  $z^*$ , the difference is statistically significant at the level indicated by  $z^*$ , e.g., 95%.

Qwest compares the calculated  $z$  with  $z^*$  in the parity score.

### 1.1.2 Parity Scores

The parity score indicates whether there is numerical parity or disparity between IEC non-affiliate and Qwest affiliate results. For large sample sizes, the parity score is calculated directly from  $z$  and  $z^*$ . For small sample sizes, an additional step is performed to calculate the parity score.

The z-test assumes large sample sizes. When sample sizes are small, or the data are skewed, the z-test may give a result that is more likely to be in error.

To overcome these problems, Qwest Regulatory Reporting uses a permutation testing procedure. The permutation test is a non-parametric test, which means that it does not make any assumptions about the distribution of the data, e.g., normality, or number of observations. It constructs its own distribution based on the data available. It does this by randomly generating 1000 samples, each dividing the data between IEC and retail. If 50 samples out of the 1000 have a mean difference larger than the actual mean difference, then we have a non-significant result (at  $\alpha=0.05$ ). If not, we have a significant result.<sup>2</sup>

Regulatory Reporting calculates the actual probability of obtaining a result at least as extreme as the actual result. This is called the p-value, and takes a value from zero to 100. If the p-value is .05 or less, the result is statistically significant.

Regulatory Reporting then converts the p-value to a z-score using a standard normal distribution function, and calculates the parity score from this z-score.

Regulatory Reporting performs permutation tests on all samples where the z-score is greater than zero and where the IEC or Qwest sample size is 100 or less.

For proportion type measures, Regulatory Reporting uses an exact probability test, which is also a form of a permutation test.<sup>3</sup> The results of the exact test are reflected in the parity score. Regulatory Reporting performs the exact probability test for all proportion type measures where there is a positive difference between the IEC and retail proportions and where the non-affiliate IEC or Qwest affiliate sample size is less than or equal to 500.

The parity scores indicate whether there is parity between a non-affiliate measurement and its affiliate comparative, taking into account the permutation testing results. The following table indicates how to interpret parity scores:

<sup>1</sup> See Appendix B of the FCC's order in BANY-NY, FCC99-404, p.9.

<sup>2</sup> Joint Proposed Rule Language for Statistical Analysis Process by Drs. Michael Carnall and Colin Mallows, Colorado Public Utilities Commission 97R-153T, December 9, 1998.

<sup>3</sup> This test is based on Fisher's exact probability test, based on a hypergeometric distribution, but does not restrict the marginals. Sidney Siegel, Nonparametric Statistics, New York: McGraw-Hill, 1956, p. 96.

Parity Score	Meaning
< -1.0	Non-affiliate is "better" than affiliate comparative
= -1.0	Non-affiliate and affiliate appear to be exactly equal
> -1.0 and < 0.0	Qwest affiliate appears to be "better" than non-affiliate, but the difference is not statistically significant
>= 0.0	Qwest affiliate is better than non-affiliate and the difference is statistically significant.

The parity score is calculated from the z-score and  $z^*$ , the z critical value.<sup>4</sup>

$$Score = \frac{z - z^*}{z^*}$$

where:

$z$  = the calculated z-score, and

$z^*$  = the critical z-value (1.645).

The parity score represents the relationship of the calculated z-score to the critical z-value. If it is zero or greater, there is a statistically significant difference at the nominal significance level of 5%.

<sup>4</sup> The critical  $z^*$  value is from a standard table of critical  $z^*$  values. Qwest uses a  $z^*$  that sets  $\alpha=.05$  for one test, or  $z^* = 1.645$ . This corresponds to a 95% level of confidence.



## ***Performance Results***

***Regional***  
***November 2003 - April 2004***

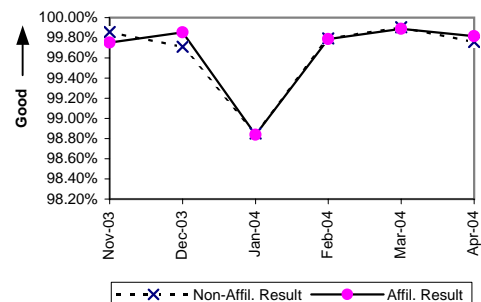
**May 11, 2004**

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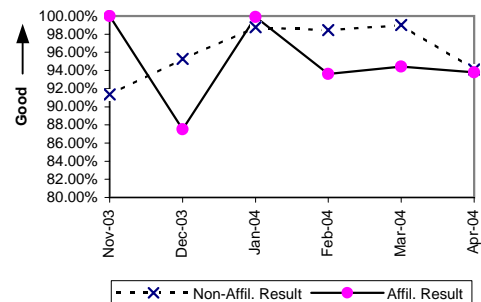
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## PIC Change

PC1A								
Date	Non-Affil. Num	Non-Affil. Den	Non-Affil. Re	Non-Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Parity Scr
Nov-03	71509	71611	99.86%	3.77%	58504	58649	99.75%	-1.88
Dec-03	84261	84506	99.71%	5.38%	83923	84046	99.85%	0.79
Jan-04	77614	78517	98.85%	10.66%	155361	157187	98.84%	-1.06
Feb-04	70740	70886	99.79%	4.53%	167991	168350	99.79%	-1.08
Mar-04	78882	78957	99.91%	3.08%	136717	136867	99.89%	-1.23
Apr-04	66574	66736	99.76%	4.92%	108494	108695	99.82%	-0.36



PC1B								
Date	Non-Affil. Num	Non-Affil. Den	Non-Affil. Re	Non-Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Parity Scr
Nov-03	1195	1308	91.36%	28.09%	149	149	100.00%	0.22
Dec-03	1352	1419	95.28%	21.21%	735	840	87.50%	-2.46
Jan-04	1848	1871	98.77%	11.02%	931	932	99.89%	1.31
Feb-04	1658	1684	98.46%	12.33%	2138	2284	93.61%	-2.67
Mar-04	1594	1610	99.01%	9.92%	1655	1753	94.41%	-2.57
Apr-04	1402	1490	94.09%	23.57%	2098	2237	93.79%	-1.1





## ***Performance Results***

***272 Qwest Non-Affiliate Identifier  
Regional  
November 2003 - April 2004***

**May 11, 2004**



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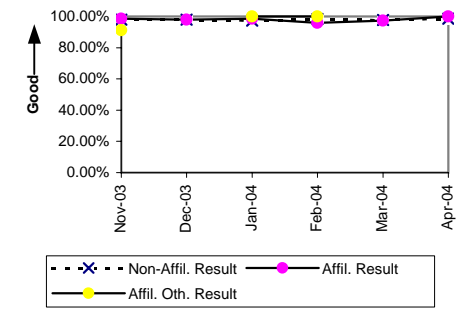
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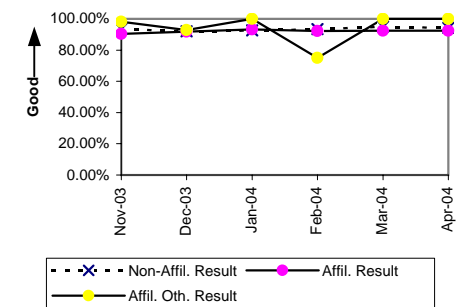
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## PO-5D - Firm Order Confirmations (FOC) On Time

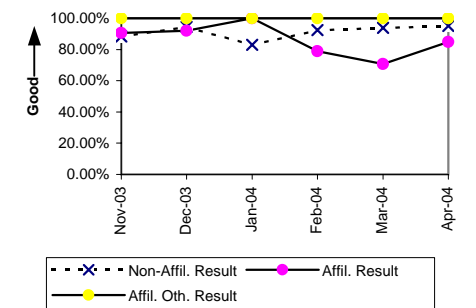
Project 272 - DS0												
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	1419	1449	97.93%	14.24%	136	138	98.55%	-0.89	31	34	91.18%	-1.37
Dec-03	1933	1974	97.92%	14.26%	142	145	97.93%	-1.02				
Jan-04	1476	1517	97.30%	16.22%	139	141	98.58%	-0.76	12	12	100.00%	-0.9
Feb-04	1590	1618	98.27%	13.04%	167	174	95.98%	-1.4	2	2	100.00%	-1
Mar-04	1870	1913	97.75%	14.82%	71	73	97.26%	-1.07				
Apr-04	2215	2246	98.62%	11.67%	103	103	100.00%	-0.67				



Project 272 - DS1												
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	7336	7841	93.56%	24.55%	284	314	90.45%	-1.43	164	167	98.20%	-0.36
Dec-03	8747	9503	92.04%	27.06%	418	455	91.87%	-1.03	13	14	92.86%	-1
Jan-04	8455	9121	92.70%	26.02%	569	610	93.28%	-0.87	32	32	100.00%	-0.6
Feb-04	8120	8690	93.44%	24.76%	576	624	92.31%	-1.24	3	4	75.00%	-1.2
Mar-04	8698	9154	95.02%	21.76%	576	623	92.46%	-1.55	2	2	100.00%	-0.97
Apr-04	8413	8932	94.19%	23.39%	530	573	92.50%	-1.35	42	42	100.00%	-0.59



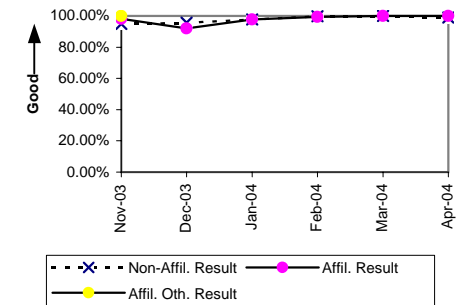
Project 272 - DS3												
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	257	291	88.32%	32.12%	19	21	90.48%	-0.9	6	6	100.00%	-0.63
Dec-03	290	307	94.46%	22.87%	23	25	92.00%	-1.16	6	6	100.00%	-0.87
Jan-04	273	329	82.98%	37.58%	28	28	100.00%	0.03	8	8	100.00%	N/A
Feb-04	362	392	92.35%	26.58%	15	19	78.95%	-1.52	2	2	100.00%	-0.94
Mar-04	259	276	93.84%	24.04%	29	41	70.73%	-2.52	1	1	100.00%	-1
Apr-04	209	220	95.00%	21.79%	28	33	84.85%	-1.76	1	1	100.00%	-1.01



## PO-5D - Firm Order Confirmations (FOC) On Time

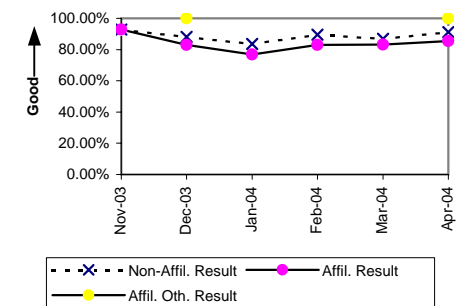
Feature Group D 272

Date	Non-Affil. Num	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Num	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	1077	1134	94.97%	21.85%	377	384	98.18%	-0.23	1	1	100.00%	-0.99
Dec-03	655	684	95.76%	20.15%	35	38	92.11%	-1.22				
Jan-04	558	571	97.72%	14.92%	83	85	97.65%	-1.02				
Feb-04	820	822	99.76%	4.93%	187	188	99.47%	-1.13				
Mar-04	315	315	100.00%	0.00%	22	22	100.00%					
Apr-04	356	360	98.89%	10.48%	16	16	100.00%	-0.95				



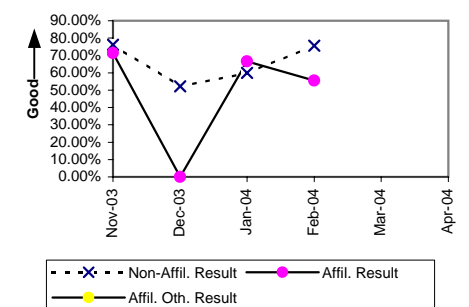
Frame Relay 272

Date	Non-Affil. Num	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Num	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	327	352	92.90%	25.69%	52	56	92.86%	-1				
Dec-03	452	513	88.11%	32.37%	68	82	82.93%	-1.43	2	2	100.00%	-0.9
Jan-04	322	385	83.64%	36.99%	76	99	76.77%	-1.53				
Feb-04	459	512	89.65%	30.46%	97	117	82.91%	-1.65				
Mar-04	410	472	86.86%	33.78%	94	113	83.19%	-1.35				
Apr-04	489	536	91.23%	28.28%	76	89	85.39%	-1.53	1	1	100.00%	-0.97



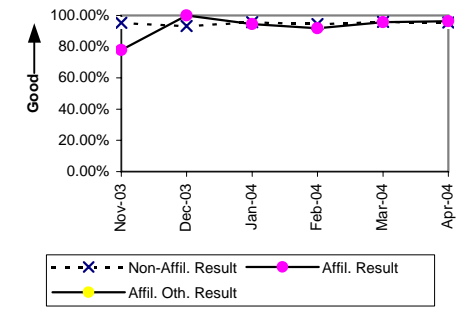
OCN 272

Date	Non-Affil. Num	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Num	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	16	21	76.19%	42.59%	5	7	71.43%	-1.15				
Dec-03	12	23	52.17%	49.95%	0	2	0.00%					
Jan-04	15	25	60.00%	48.99%	6	9	66.67%	-0.83				
Feb-04	31	41	75.61%	42.94%	5	9	55.56%	-1.67				
Mar-04												
Apr-04												

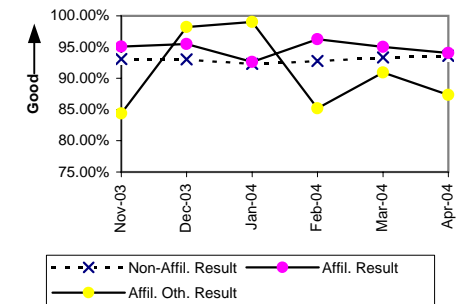


## OP-3 - Installation Commitments Met

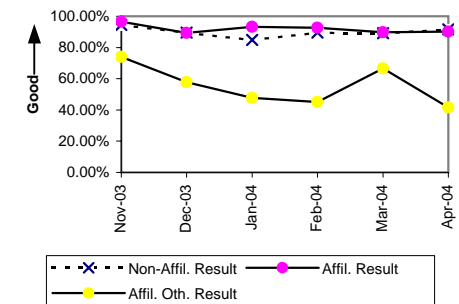
Project 272 - DS0												
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	897	942	95.22%	21.33%	14	18	77.78%	-1.48				
Dec-03	765	821	93.18%	25.21%	31	31	100.00%	-0.55				
Jan-04	804	840	95.71%	20.25%	69	73	94.52%	-1.12				
Feb-04	706	748	94.39%	23.02%	113	123	91.87%	-1.26				
Mar-04	936	976	95.90%	19.83%	67	70	95.71%	-1.02				
Apr-04	942	987	95.44%	20.86%	52	54	96.30%	-0.95				



Project 272 - DS1												
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	5752	6178	93.10%	25.34%	291	306	95.10%	-0.68	27	32	84.38%	-1.32
Dec-03	6375	6853	93.03%	25.47%	358	375	95.47%	-0.56	109	111	98.20%	-0.44
Jan-04	6270	6793	92.30%	26.66%	503	543	92.63%	-0.93	103	104	99.04%	-0.29
Feb-04	5472	5897	92.79%	25.86%	537	558	96.24%	-0.05	23	27	85.19%	-1.26
Mar-04	6149	6587	93.35%	24.91%	726	764	95.03%	-0.53	40	44	90.91%	-1.13
Apr-04	6253	6680	93.61%	24.46%	619	658	94.07%	-0.89	62	71	87.32%	-1.37



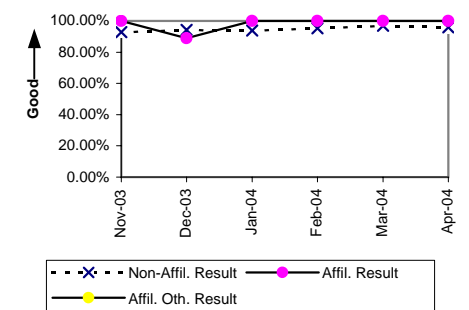
Project 272 - DS3												
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	359	380	94.47%	22.85%	54	56	96.43%	-0.8	17	23	73.91%	-1.81
Dec-03	337	376	89.63%	30.49%	59	66	89.39%	-1.02	15	26	57.69%	-2.18
Jan-04	229	270	84.81%	35.89%	56	60	93.33%	-0.1	11	23	47.83%	-2.7
Feb-04	379	423	89.60%	30.53%	50	54	92.59%	-0.76	9	20	45.00%	-2.45
Mar-04	358	402	89.05%	31.22%	52	58	89.66%	-0.97	18	27	66.67%	-1.88
Apr-04	431	471	91.51%	27.88%	74	82	90.24%	-1.13	10	24	41.67%	-2.79



## OP-3 - Installation Commitments Met

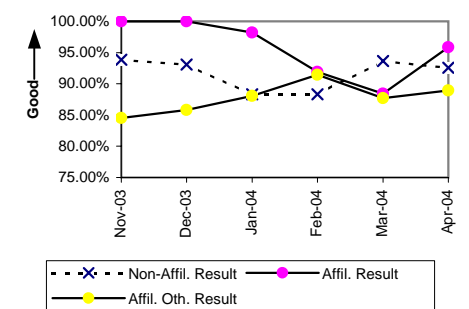
Feature Group D 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	194	209	92.82%	25.81%	170	170	100.00%	0.79				
Dec-03	250	265	94.34%	23.11%	8	9	88.89%	-1.26				
Jan-04	213	227	93.83%	24.06%	19	19	100.00%	-0.45				
Feb-04	165	173	95.38%	21.00%	52	52	100.00%	-0.17				
Mar-04	220	227	96.92%	17.29%	165	165	100.00%	0.14				
Apr-04	183	191	95.81%	20.03%	96	96	100.00%	0.02				



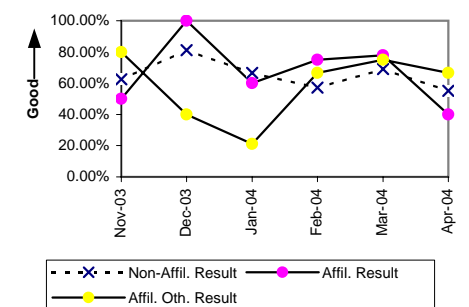
Frame Relay 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	61	65	93.85%	24.03%	12	12	100.00%	-0.55	667	789	84.54%	-2.21
Dec-03	54	58	93.10%	25.34%	41	41	100.00%	0	616	718	85.79%	-1.93
Jan-04	53	60	88.33%	32.10%	54	55	98.18%	0.25	576	654	88.07%	-1.04
Feb-04	53	60	88.33%	32.10%	68	74	91.89%	-0.59	599	655	91.45%	-0.5
Mar-04	103	110	93.64%	24.41%	107	121	88.43%	-1.75	786	896	87.72%	-2.08
Apr-04	50	54	92.59%	26.19%	23	24	95.83%	-0.76	731	822	88.93%	-1.51



OCN 272

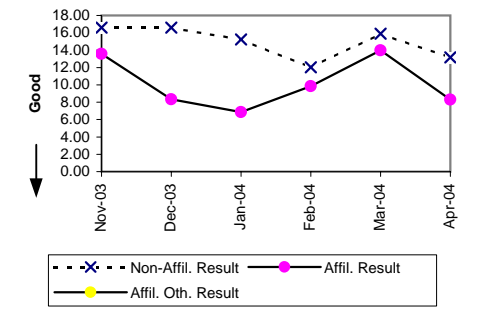
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	15	24	62.50%	48.41%	3	6	50.00%	-1.33	4	5	80.00%	-0.62
Dec-03	13	16	81.25%	39.03%	2	2	100.00%	-0.78	2	5	40.00%	-2
Jan-04	16	24	66.67%	47.14%	3	5	60.00%	-1.17	4	19	21.05%	-3.21
Feb-04	8	14	57.14%	49.49%	3	4	75.00%	-0.69	2	3	66.67%	-0.91
Mar-04	20	29	68.97%	46.26%	7	9	77.78%	-0.75	3	4	75.00%	-0.93
Apr-04	16	29	55.17%	49.73%	2	5	40.00%	-1.39	6	9	66.67%	-0.67



## OP-4 - Installation Interval

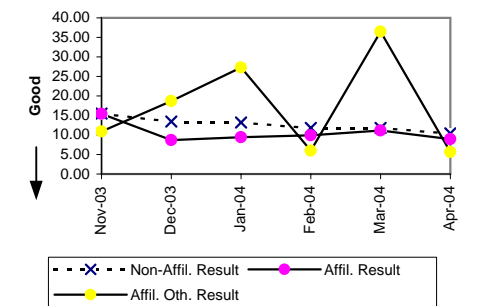
Project 272 - DS0

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	16457	991	16.61	12.62	258	19	13.58	-0.79				
Dec-03	14190	856	16.58	12.24	259	31	8.35	0.01				
Jan-04	13101	861	15.22	11.61	515	75	6.87	0.01				
Feb-04	9082	755	12.03	11.18	1250	127	9.84	-0.5				
Mar-04	16124	1015	15.89	12.22	1048	75	13.97	-0.81				
Apr-04	6133	466	13.16	11.31	257	31	8.29	0.14				



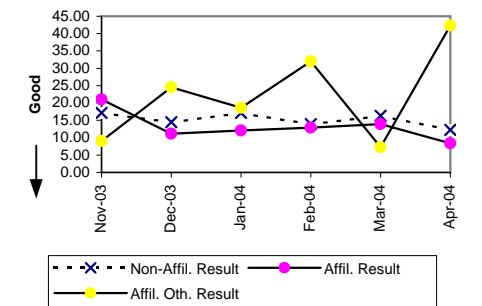
Project 272 - DS1

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	98504	6341	15.53	12.34	4865	315	15.44	-0.96	87	8	10.88	-0.74
Dec-03	95107	7087	13.42	10.95	3374	387	8.72	3.97	1966	105	18.72	-2.98
Jan-04	93072	7068	13.17	9.22	5241	558	9.39	1.46	1855	68	27.28	-9.81
Feb-04	72198	6109	11.82	8.65	5649	569	9.93	0.22	6	1	6.00	
Mar-04	80168	6809	11.77	8.97	8625	776	11.11	-0.3	73	2	36.50	-1.18
Apr-04	36588	3518	10.40	9.23	4763	532	8.95	0.34	73	13	5.62	-0.55



Project 272 - DS3

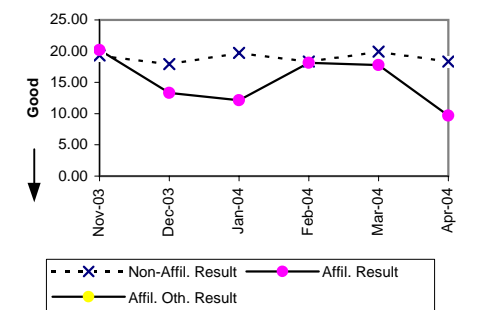
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	7481	436	17.16	14.40	1180	56	21.07	-1.62	9	1	9.00	
Dec-03	6414	444	14.45	12.71	671	60	11.18	0.38	49	2	24.50	-1.44
Jan-04	5923	346	17.12	14.27	915	76	12.04	0.38	56	3	18.67	-1.05
Feb-04	6604	473	13.96	12.07	634	49	12.94	-0.65	128	4	32.00	-1.26
Mar-04	7763	476	16.31	12.09	654	47	13.91	-0.27	58	8	7.25	0.38
Apr-04	4467	363	12.31	10.83	276	33	8.36	0.02	127	3	42.33	-1.33



## OP-4 - Installation Interval

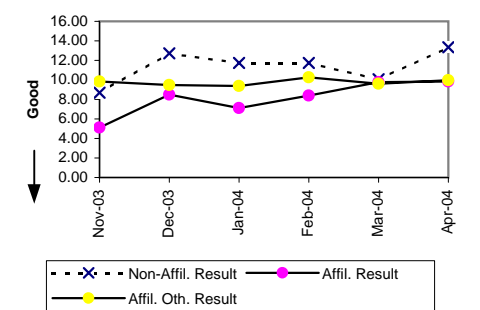
Feature Group D 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	4465	231	19.33	9.07	3428	170	20.16	-2.53				
Dec-03	5001	279	17.92	9.60	120	9	13.33	-0.33				
Jan-04	4926	250	19.70	9.36	231	19	12.16	0.86				
Feb-04	3320	181	18.34	7.91	943	52	18.13	-0.83				
Mar-04	5018	252	19.91	11.81	2931	165	17.76	1.14				
Apr-04	3612	197	18.34	6.42	861	89	9.67	0.86				



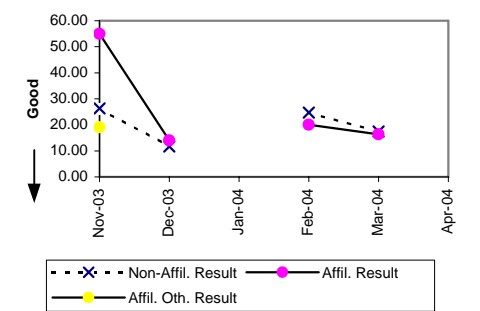
Frame Relay 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	165	19	8.68	3.33	51	10	5.10	1.26	2494	254	9.82	-1.53
Dec-03	280	22	12.73	5.20	17	2	8.50	-0.44	2503	264	9.48	0.24
Jan-04	258	22	11.73	5.82	107	15	7.13	1.26	3225	344	9.38	0.46
Feb-04	270	23	11.74	6.61	210	25	8.40	0.88	2267	221	10.26	-0.4
Mar-04	563	56	10.05	6.21	450	46	9.78	-0.82	3078	320	9.62	-0.64
Apr-04	307	23	13.35	7.99	59	6	9.83	0	3617	363	9.96	0.2



OCN 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	448	17	26.35	31.72	165	3	55.00	-1.6	38	2	19.00	
Dec-03	163	14	11.64	7.19	14	1	14.00					
Jan-04												
Feb-04	296	12	24.67	27.50	20	1	20.00					
Mar-04	471	27	17.44	10.56	49	3	16.33	-0.94				
Apr-04												

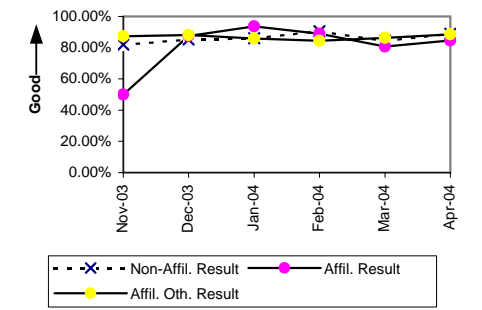




## MR-5 - All Troubles Cleared within 4 hours

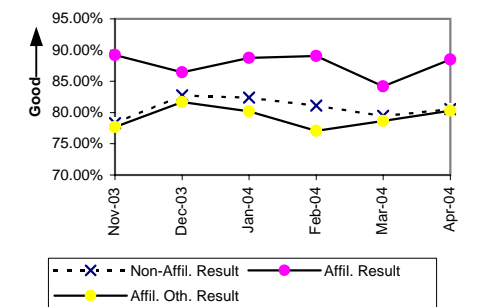
Project 272 - DS0

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	1073	1310	81.91%	38.49%	4	8	50.00%	-1.49	193	221	87.33%	-0.46
Dec-03	883	1036	85.23%	35.48%	7	8	87.50%	-0.98	184	209	88.04%	-0.71
Jan-04	979	1137	86.10%	34.59%	15	16	93.75%	-0.78	158	184	85.87%	-1.02
Feb-04	917	1012	90.61%	29.17%	16	18	88.89%	-1.06	151	179	84.36%	-1.57
Mar-04	999	1183	84.45%	36.24%	21	26	80.77%	-1.13	157	182	86.26%	-0.83
Apr-04	947	1064	89.00%	31.28%	11	13	84.62%	-1.12	176	199	88.44%	-1.06



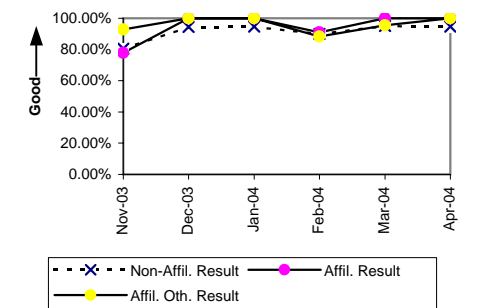
Project 272 - DS1

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	3402	4346	78.28%	41.23%	116	130	89.23%	-0.26	334	430	77.67%	-1.07
Dec-03	3455	4175	82.75%	37.78%	121	140	86.43%	-0.74	294	360	81.67%	-1.12
Jan-04	3470	4210	82.42%	38.06%	142	160	88.75%	-0.5	267	333	80.18%	-1.23
Feb-04	3104	3827	81.11%	39.14%	163	183	89.07%	-0.34	235	305	77.05%	-1.38
Mar-04	3700	4655	79.48%	40.38%	165	196	84.18%	-0.62	324	412	78.64%	-1.09
Apr-04	3780	4692	80.56%	39.57%	200	226	88.50%	-0.28	355	442	80.32%	-1.03



Project 272 - DS3

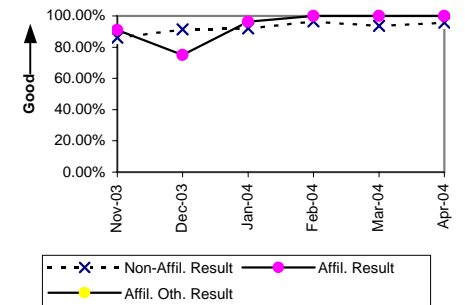
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	116	144	80.56%	39.58%	7	9	77.78%	-1.12	13	14	92.86%	-0.32
Dec-03	121	128	94.53%	22.74%	15	15	100.00%	-0.5	5	5	100.00%	N/A
Jan-04	124	131	94.66%	22.49%	7	7	100.00%	-0.76	9	9	100.00%	N/A
Feb-04	116	129	89.92%	30.10%	10	11	90.91%	-1.03	15	17	88.24%	-1.12
Mar-04	117	123	95.12%	21.54%	12	12	100.00%	-0.63	21	22	95.45%	-1.07
Apr-04	125	132	94.70%	22.41%	3	3	100.00%	-0.93	14	14	100.00%	N/A



## MR-5 - All Troubles Cleared within 4 hours

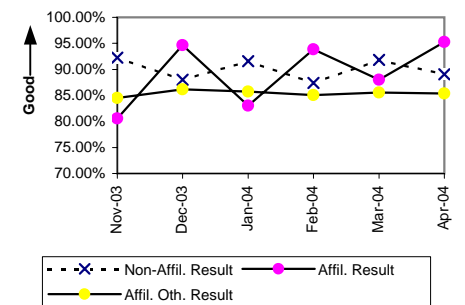
Feature Group D 272

Date	Non-Affil. Nur	Non-Affil. Der	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Der	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	62	72	86.11%	34.58%	10	11	90.91%	-0.82				
Dec-03	53	58	91.38%	28.07%	3	4	75.00%	-1.44				
Jan-04	58	63	92.06%	27.03%	26	27	96.30%	-0.62				
Feb-04	54	56	96.43%	18.56%	5	5	100.00%	-0.95				
Mar-04	58	62	93.55%	24.57%	7	7	100.00%	-0.72				
Apr-04	45	47	95.74%	20.18%	6	6	100.00%	-0.88				



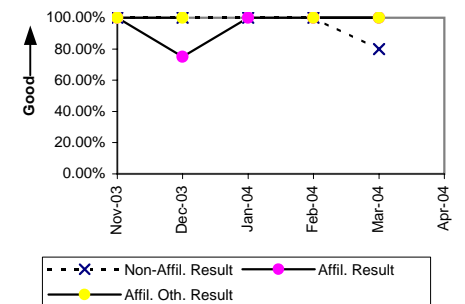
Frame Relay 272

Date	Non-Affil. Nur	Non-Affil. Der	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Der	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	107	116	92.24%	26.75%	29	36	80.56%	-1.94	371	439	84.51%	-2.24
Dec-03	88	100	88.00%	32.50%	53	56	94.64%	-0.19	362	420	86.19%	-1.29
Jan-04	109	119	91.60%	27.74%	44	53	83.02%	-1.84	342	399	85.71%	-1.98
Feb-04	97	111	87.39%	33.20%	46	49	93.88%	-0.26	291	342	85.09%	-1.36
Mar-04	90	98	91.84%	27.38%	44	50	88.00%	-1.41	367	429	85.55%	-1.97
Apr-04	122	137	89.05%	31.23%	40	42	95.24%	-0.28	373	437	85.35%	-1.65



OCN 272

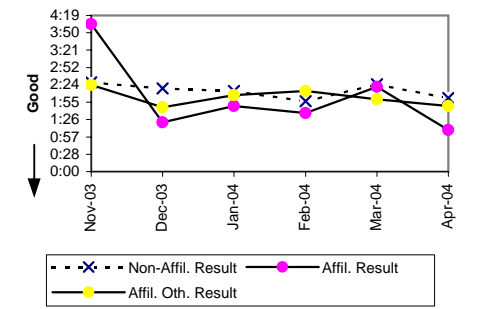
Date	Non-Affil. Nur	Non-Affil. Der	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Der	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	5	5	100.00%	0.00%	4	4	100.00%		2	2	100.00%	N/A
Dec-03	2	2	100.00%	0.00%	6	8	75.00%	-1.44	1	1	100.00%	N/A
Jan-04	6	6	100.00%	0.00%	2	2	100.00%					
Feb-04	3	3	100.00%	0.00%	3	3	100.00%		1	1	100.00%	N/A
Mar-04	4	5	80.00%	40.00%	2	2	100.00%	-0.84	1	1	100.00%	N/A
Apr-04												



## MR-6 - Mean Time to Restore

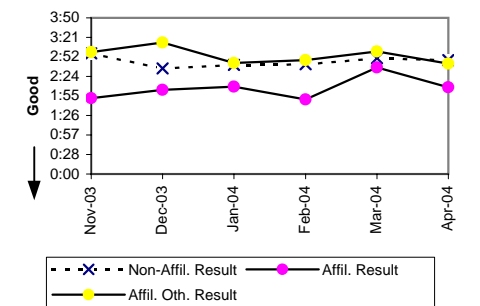
Project 272 - DS0

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	3242:14	1310	2:28	2:49	32:41	8	4:05	-1.37	531:54	221	2:24	-0.94
Dec-03	2378:42	1036	2:18	3:07	10:54	8	1:22	-0.77	373:01	209	1:47	-0.16
Jan-04	2542:33	1137	2:14	2:46	29:11	16	1:49	-0.85	390:13	184	2:07	-0.86
Feb-04	1976:18	1012	1:57	2:38	29:10	18	1:37	-0.86	399:21	179	2:14	-1.32
Mar-04	2863:49	1183	2:25	3:26	60:59	26	2:21	-1.01	363:29	182	2:00	-0.39
Apr-04	2166:34	1064	2:02	2:47	14:58	13	1:09	-0.74	361:32	199	1:49	-0.63



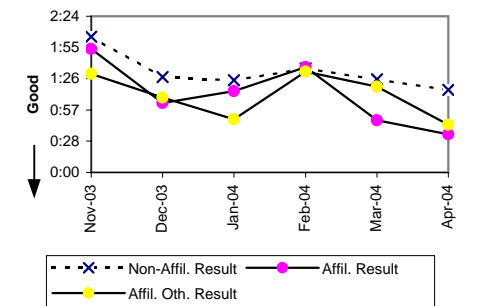
Project 272 - DS1

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	12909:11	4346	2:58	3:30	243:15	130	1:52	0.07	1292:42	430	3:00	-1.05
Dec-03	10829:41	4175	2:36	3:02	288:59	140	2:04	-0.46	1165:52	360	3:14	-1.36
Jan-04	11292:45	4210	2:41	3:12	344:47	160	2:09	-0.61	912:46	333	2:44	-1.08
Feb-04	10329:57	3827	2:42	3:07	334:33	183	1:50	0.33	855:19	305	2:48	-1.15
Mar-04	13301:43	4655	2:51	3:16	513:34	196	2:37	-0.82	1245:09	412	3:01	-1.21
Apr-04	13176:09	4692	2:48	3:09	483:31	226	2:08	-0.06	1198:20	442	2:43	-0.85



Project 272 - DS3

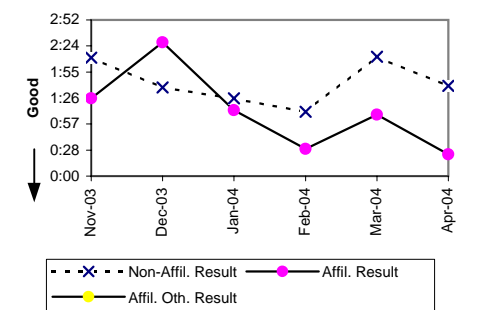
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	299:57	144	2:05	2:16	17:06	9	1:54	-0.86	21:10	14	1:31	-0.34
Dec-03	187:29	128	1:28	1:30	15:57	15	1:04	-0.29	5:46	5	1:09	-0.69
Jan-04	186:17	131	1:25	1:18	8:42	7	1:15	-0.87	7:21	9	0:49	-0.07
Feb-04	206:36	129	1:36	2:08	17:45	11	1:37	-1.02	26:27	17	1:33	-1.07
Mar-04	176:46	123	1:26	1:28	9:36	12	0:48	-0.23	28:56	22	1:19	-0.82
Apr-04	167:32	132	1:16	1:56	1:45	3	0:35	-0.61	10:11	14	0:44	-0.08



## MR-6 - Mean Time to Restore

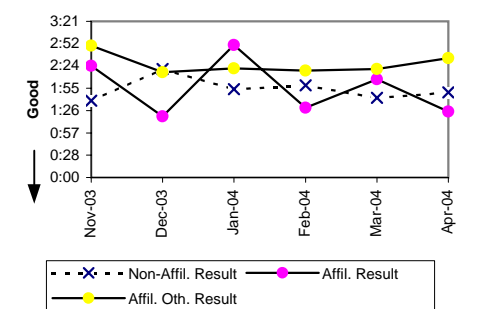
Feature Group D 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	157:29	72	2:11	2:50	15:42	11	1:26	-0.52				
Dec-03	95:09	58	1:38	1:45	9:53	4	2:28	-1.32				
Jan-04	90:08	63	1:26	1:40	32:44	27	1:13	-0.93				
Feb-04	66:40	56	1:11	1:01	2:30	5	0:30	-0.01				
Mar-04	136:46	62	2:12	4:47	7:59	7	1:08	-0.92				
Apr-04	78:32	47	1:40	2:18	2:21	6	0:24	0.32				



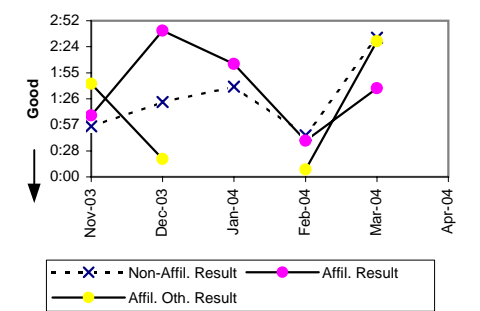
Frame Relay 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	191:05	116	1:39	2:21	86:35	36	2:24	-1.78	1240:42	439	2:50	-2.19
Dec-03	233:39	100	2:20	3:34	73:26	56	1:19	0.12	952:34	420	2:16	-0.84
Jan-04	226:20	119	1:54	2:36	150:57	53	2:51	-1.73	936:04	399	2:21	-1.89
Feb-04	220:22	111	1:59	2:10	73:54	49	1:30	-0.1	786:32	342	2:18	-1.66
Mar-04	167:41	98	1:43	1:53	105:40	50	2:07	-1.55	998:30	429	2:20	-2.06
Apr-04	251:01	137	1:50	1:49	59:39	42	1:25	-0.01	1119:53	437	2:34	-2.29



OCN 272

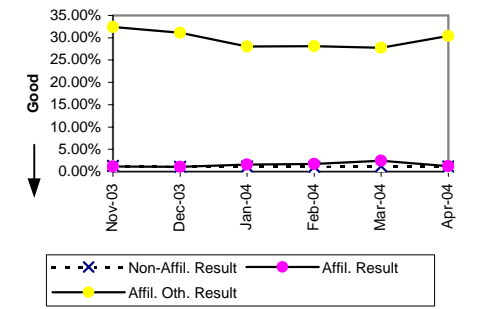
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	4:42	5	0:56	0:28	4:33	4	1:08	-1.25	3:26	2	1:43	-8.98
Dec-03	2:46	2	1:23	0:35	21:39	8	2:42	-1.57	0:20	1	0:20	
Jan-04	9:59	6	1:40	1:26	4:10	2	2:05	-1.38				
Feb-04	2:18	3	0:46	0:59	2:01	3	0:40	-0.74	0:08	1	0:08	
Mar-04	12:50	5	2:34	2:27	3:16	2	1:38	-0.81	2:30	1	2:30	
Apr-04												



## MR-8 - Trouble Rate

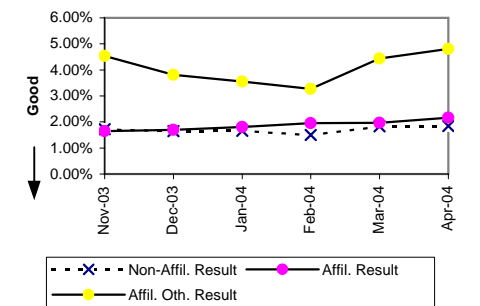
Project 272 - DS0

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	1310	100097	1.31%	11.36%	8	684	1.17%	-0.92	221	681	32.45%	-5.02
Dec-03	1036	98937	1.05%	10.18%	8	748	1.07%	-1.01	209	672	31.10%	-4.9
Jan-04	1137	97398	1.17%	10.74%	16	1017	1.57%	-1.24	184	656	28.05%	-4.55
Feb-04	1012	96095	1.05%	10.21%	18	1055	1.71%	-1.38	179	636	28.14%	-4.52
Mar-04	1183	95298	1.24%	11.07%	26	1062	2.45%	-1.59	182	655	27.79%	-4.51
Apr-04	1064	93087	1.14%	10.63%	13	1053	1.23%	-1.06	199	655	30.38%	-4.77



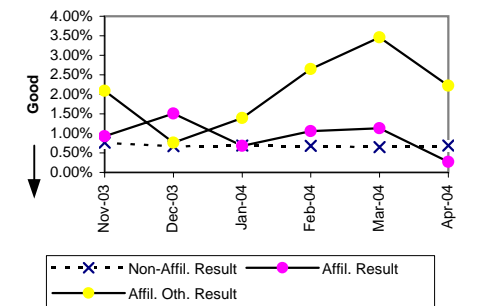
Project 272 - DS1

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	4346	251609	1.73%	13.03%	130	7878	1.65%	-0.88	430	9476	4.54%	-4
Dec-03	4175	253002	1.65%	12.74%	140	8278	1.69%	-1.07	360	9452	3.81%	-3.5
Jan-04	4210	254297	1.66%	12.76%	160	8832	1.81%	-1.25	333	9374	3.55%	-3.27
Feb-04	3827	254459	1.50%	12.17%	183	9365	1.95%	-1.72	305	9334	3.27%	-3.19
Mar-04	4655	253664	1.84%	13.42%	196	9947	1.97%	-1.22	412	9272	4.44%	-3.78
Apr-04	4692	253847	1.85%	13.47%	226	10460	2.16%	-1.5	442	9197	4.81%	-4.03



Project 272 - DS3

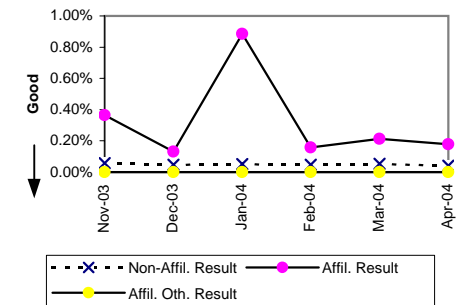
Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	144	18855	0.76%	8.71%	9	968	0.93%	-1.12	14	670	2.09%	-1.55
Dec-03	128	18977	0.67%	8.19%	15	995	1.51%	-1.49	5	658	0.76%	-1.06
Jan-04	131	18969	0.69%	8.28%	7	1027	0.68%	-0.99	9	647	1.39%	-1.35
Feb-04	129	19028	0.68%	8.21%	11	1042	1.06%	-1.27	17	643	2.64%	-1.71
Mar-04	123	19026	0.65%	8.01%	12	1060	1.13%	-1.34	22	636	3.46%	-1.89
Apr-04	132	19097	0.69%	8.29%	3	1113	0.27%	-0.39	14	631	2.22%	-1.6



## MR-8 - Trouble Rate

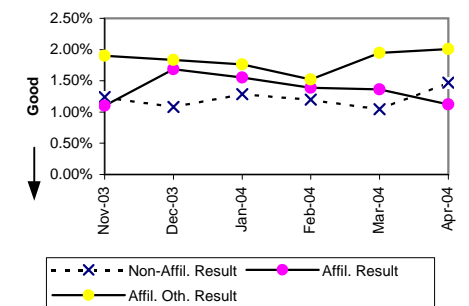
Feature Group D 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	72	125945	0.06%	2.39%	11	3021	0.36%	-1.64	0	1152	0.00%	
Dec-03	58	122673	0.05%	2.17%	4	3029	0.13%	-1.3	0	1153	0.00%	
Jan-04	63	120578	0.05%	2.29%	27	3052	0.88%	-2.13	0	1153	0.00%	
Feb-04	56	118940	0.05%	2.17%	5	3157	0.16%	-1.36	0	1153	0.00%	
Mar-04	62	117697	0.05%	2.29%	7	3282	0.21%	-1.46	0	1155	0.00%	
Apr-04	47	116509	0.04%	2.01%	6	3351	0.18%	-1.44	0	1155	0.00%	



Frame Relay 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	116	9351	1.24%	11.07%	36	3262	1.10%	-0.85	439	23069	1.90%	-1.92
Dec-03	100	9249	1.08%	10.34%	56	3318	1.69%	-1.54	420	22875	1.84%	-2.06
Jan-04	119	9237	1.29%	11.28%	53	3416	1.55%	-1.25	399	22644	1.76%	-1.68
Feb-04	111	9271	1.20%	10.88%	49	3531	1.39%	-1.19	342	22470	1.52%	-1.5
Mar-04	98	9387	1.04%	10.16%	50	3663	1.37%	-1.33	429	22043	1.95%	-2.23
Apr-04	137	9325	1.47%	12.03%	42	3740	1.12%	-0.61	437	21749	2.01%	-1.72



OCN 272

Date	Non-Affil. Nur	Non-Affil. Den	Non-Affil. Res	Non. Affil. Std	Affil. Num	Affil. Denom	Affil. Result	Affil. Parity	Affil. Oth. Nur	Affil. Oth. Den	Affil. Oth. Res	Affil. Oth. Parity
Nov-03	5	3060	0.16%	4.04%	4	513	0.78%	-1.34	2	199	1.01%	-1.27
Dec-03	2	3070	0.07%	2.55%	8	528	1.52%	-1.59	1	199	0.50%	-1.2
Jan-04	6	3078	0.19%	4.41%	2	533	0.38%	-1.15	0	199	0.00%	-0.91
Feb-04	3	3089	0.10%	3.11%	3	541	0.55%	-1.31	1	199	0.50%	-1.18
Mar-04	5	3099	0.16%	4.01%	2	552	0.36%	-1.17	1	203	0.49%	-1.15
Apr-04	7	3112	0.22%	4.74%	0	552	0.00%		0	208	0.00%	N/A

